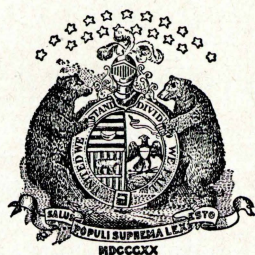


MISSOURI STATE BOARD OF HEALTH



QUARTERLY BULLETIN.

NEW SERIES.

VOL. 1.

OCTOBER-DECEMBER, 1911

NO. 2.

MEMBERS OF THE BOARD.

FRANK B. FURSON, M. D., President, Springfield.
M. P. OVERHOLSER, M. D., Vice President, Nevada.
FRANK B. HILLER, M. D., Secretary.

ERNST F. ROBINSON, M. D. 603 Bryant Bldg. Kansas City.
IRA W. UPshaw, M. D. 5015 Shaw Ave. St. Louis.
L. E. BUNTE, M. D., 3203 Sullivan Ave. St. Louis.
G. B. SCHULTZ, Cape Girardeau.

Dr. Murray C. Stone, State Bacteriologist, Jefferson City.
W. E. Crampton, Statistician, Jefferson City, Missouri.

CONTENTS.

	Page
Epidemic Cerebro-Spinal Meningitis	3, 5
September Examinations	5
Summary of Licenses issued in 1911	6
Rules Concerning Reciprocity	6, 7
Economic Loss from Tuberculosis in 1911	7, 9
Missouri in Registration Area	9, 10
Some Important Causes of Death, July to December	10, 11
Statistical Tables, July to January 1st	12, 43
The Bacteriological Laboratory	44, 47

A FOREWORD.

The Vital Statistics Law has been in operation since February 1, 1910, and the results in this time compare very favorably with that of states where the law has been in force for a much longer period. The compilation of statistics up to this time has been carried on in a comparatively elementary manner, but in due time more detailed reports giving statistics of both births and deaths by color, race, sex and occupation will be furnished. The rate of births and deaths according to color is a very important one, and much valuable information can be obtained from such a compilation. The cause of death will also be considered in relation to the various occupations, and statistics on this question can be made of estimable value.

BULLETIN
OF THE
Missouri State Board of Health
NEW SERIES.

VOL. 1.

OCTOBER-DECEMBER, 1911.

NO. 2.

CEREBRO-SPINAL MENINGITIS.

The sudden and unexpected appearance of cerebrospinal meningitis in communities hitherto free from the disease indicates that a brief review of the subject would not be out of place. This is especially true since during the past year the value of antimeningitis serum has become fully established, and the product has been placed upon the market.

Etiology.

The infecting agent is a specific germ, the meningococcus, which, gaining access to the meninges of the brain and spinal cord, sets up an acute inflammation with an increase in the amount of spinal fluid, which rapidly becomes purulent. The infection in the majority of cases enters the body through the nasal passages, and the discharges from the nose and throat are infectious.

Diagnosis.

An early diagnosis is of the utmost importance if benefit is to be expected from the use of antitoxin. By an early diagnosis is meant one made within the first twenty-four hours of the disease. This is usually not difficult if a lumbar puncture is made in suspicious cases. The very sudden onset, manifest by intense headache, fever, vomiting, and in children, often with convulsions, leads one to suspect this form of meningitis. Delirium, pain in the back of the neck and along the spine and muscular rigidity, are also commonly seen early in the disease. Symptoms of this character are especially suggestive when the disease is epidemic, or when the digestive and respiratory systems show no physical signs.

A lumbar puncture, with proper care to avoid infection, is entirely harmless, and should be used in suspicious cases, especially during the

prevalence of meningitis in a community. If a cloudy or slightly cloudy fluid is obtained, the probability is that the case is one of epidemic cerebrospinal meningitis, and the antitoxin should be used at once. The spinal fluid may then be examined microscopically and the subsequent treatment outlined according to the findings. A clear spinal fluid is often obtained in tuberculous meningitis, but very rarely in the epidemic form.

Cases of pneumococcus meningitis appear to be more frequent during an epidemic of the meningococcus variety, and mixed infections sometimes occur. These also give a cloudy fluid, but the difference is easily discovered by the use of the microscope.

Treatment.

It should be clearly understood that the antimeningitis serum is always to be used by injection into the spinal canal. Subcutaneous injection, as in diphtheria, is of no benefit.

To obtain good results treatment must be begun very early, during the first twenty-four hours of the disease. Such cases properly treated show a mortality of about thirty per cent, as compared with a mortality of seventy per cent in cases not receiving specific treatment. If possible, the antimeningitis serum should be injected at the time the fluid is withdrawn for diagnosis. The amount of fluid that can be obtained is of less importance than the amount of serum that should be injected. The fluid should be allowed to run until at least 30 c. c. have escaped. If the pressure is still considerable and no untoward symptoms appear, such as pain in the head, or restlessness, 40 or 50 c. c. should be taken. The removal of a considerable quantity of fluid is of benefit not only in lessening the pressure, but it diminishes the amount of toxin which is acting upon the nerve tissues. At times it is difficult to obtain more than 10 or 20 c. c. Then if the serum is at hand it may be injected, slowly and slightly warmed, without removing the needle. At least 30 c. c. should be used for each dose in every case, and if the pressure seems not too great or too much discomfort is shown, 45 c. c. should be used. The importance of these larger doses cannot be overestimated, as well as their early and repeated use. Some little time is required for the antitoxin to obtain its maximum effect, and the best results seem to follow its use in a more or less empirical manner. Accordingly, the use of 30 or 45 c. c. of serum is recommended daily for four successive days, without taking into consideration any improvement on the part of the patient. Next to the use of early and large doses, the use of regularly repeated doses is essential. At the time of each lumbar puncture for the purpose of giving the antitoxin, as much spinal fluid as is deemed wise should be allowed

to escape. It is also recommended that the foot of the bed should be raised immediately following the injection of the serum, with the view of aiding its distribution along the meninges.

The subsequent treatment of a case after the four doses have been given will depend upon the symptoms. It may be necessary to continue the use of the serum, but if the improvement is marked, further doses need not be given unless there is a return of the symptoms.

It is recommended that urotsoprin be given during the course of the disease; other treatment is entirely symptomatic.

Prophylaxis.

The patient should be isolated, and the general rules of quarantine applied, which are used in diphtheria or scarlet fever. The length of time that quarantine should be maintained will depend upon the course of the case. Nose and throat should be in the normal condition and convalescence well established before the quarantine is raised.

A mild nasal spray and mouth wash is recommended for use by the attendants.

SEPTEMBER EXAMINATIONS.

On September 25th, 26th and 27th, examination of applicants for license to practice medicine and surgery, was conducted at Kansas City. Fifty-three took this examination, with the result that thirty-six passed and seventeen failed.

Below appears the names of the medical colleges represented, with an analysis of the result of the examination as it might apply to colleges:

KANSAS CITY EXAMINATION, SEPTEMBER 25, 26 AND 27, 1911.

Colleges.	Number examined.	Number passed.	Number failed.	Per cent of failures.
American Medical.....	2	2	0	0
Barnes Medical.....	10	5	5	50
Creighton Medical.....	1	0	1	100
Ensworth Medical.....	4	2	2	50
Illinois Medical.....	1	1	0	0
Johns Hopkins.....	2	2	0	0
Kansas Medical.....	1	1	0	0
Kansas University.....	1	1	0	0
Kentucky School of Medicine.....	1	0	1	100
Kansas City Hahnemann.....	4	4	0	0
Louisville University.....	4	2	2	50
Meharry Medical.....	1	1	0	0
Northwestern Medical.....	1	1	0	0
Physicians and Surgeons, St. Louis.....	7	2	5	71 3-7
Rush Medical.....	2	2	0	0
St. Louis University.....	1	1	0	0
Pennsylvania University.....	1	1	0	0
Washington University.....	1	1	0	0
University Medical.....	8	7	1	12½

SUMMARY OF LICENSES ISSUED DURING THE YEAR 1911.

During the year 1911 licenses to practice medicine and surgery have been issued by the Missouri State Board of Health to 258 physicians, 192 of this number were licensed upon examination, while 66 were licensed upon reciprocity.

During the same period licenses were issued to five midwives.

The table below will show the states from which physicians licensed on reciprocity came, and the number per state:

State.	Number Licensed.
District of Columbia.....	2
Illinois.....	10
Indiana.....	3
Iowa.....	11
Kansas.....	17
Kentucky.....	3
Maine.....	1
Maryland.....	1
Minnesota.....	3
Nebraska.....	9
Ohio.....	1
Texas.....	1
Utah.....	1
Virginia.....	1
West Virginia.....	1
Wisconsin.....	1

RULES GOVERNING THE ISSUANCE OF LICENSES TO PRACTICE MEDICINE AND SURGERY ON THE BASIS OF RECIPROCITY.

Reciprocity, on the basis of examination only, exists between Missouri and the following named states, viz.: Illinois, Louisiana, North Dakota, South Carolina, Texas and Virginia.

It is required of an applicant coming from Illinois that he shall have been licensed in that state on a date since January 1, 1907.

In the other above-named states we require that an applicant shall have been licensed on examination on a date since June 1, 1901.

Reciprocity on the basis of diploma or examination exists between Missouri and the following named states, viz.: Colorado, District of Columbia, Georgia, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Michigan, Minnesota, Nebraska, Nevada, New Hampshire, Ohio, Utah, Vermont, West Virginia and Wisconsin.

We require of those licensed on diploma only, that they shall have been so licensed prior to June 1, 1901.

Those licensed on a date since June 1, 1901, in the states with which

we reciprocate on both qualifications, shall have been licensed on both diploma and examination.

One year's practice in a reciprocating state is required of all applicants.

Membership in a county, district or national medical society is also required.

It is required that all applicants shall be graduates of accredited medical colleges.

Applicants for a certificate on the basis of reciprocity, must make formal application on a blank provided by the Missouri State Board of Health.

In sending application to the office of the Secretary, it must be accompanied by diploma of graduation, the original certificate issued by the reciprocating state and the fee, which is twenty-five dollars (\$25.00).

ECONOMIC LOSS TO MISSOURI FROM TUBERCULOSIS IN 1911.

W. McN. Miller, M. D., Secretary.

The Missouri Association for the Relief and Control of Tuberculosis, Columbia, Mo.:

Sources of Information:

A. Riley, Dr. Thomas J., Economic Cost of Tuberculosis to the State of Missouri in the year 1910; Special Message of Governor Herbert S. Hadley regarding the Control and Prevention of Tuberculosis, together with a report of the Voluntary Commission to the Forty-Sixth General Assembly, 1911, Jefferson City, Mo.

B. Missouri State Board of Health, Quarterly Bulletin, New Series, Vol. 1, No. 1, July-September, 1911, Jefferson City, Mo.

C. Official Manual of the State of Missouri for the years 1911-12. Cornelius Roach, Secretary of State, Jefferson City, Mo.

1. (A. Page 59.) The total cost of nursing, medical attendance, medicine, special diet and travel of those who died, each case costs the community \$821.25.

(B. Pages 10 and 38, computed.)

Deaths from tuberculosis, all forms, January 1, to June 30.....	2,782
Same, estimated, July 1, to December 31.	2,782
Total, same estimated, January 1, to December 31	5,564
\$821.25x5,564	\$4,569,435.00

II. (A. Page 61.) Loss of earnings on account of the partial and total disability of the decedent, during sickness: 3,171 men, 2,393 women.

Of these there were wealth producers—

2,142 men x \$1,575.00.....	\$3,365,650.00
1,196 women x \$787.50.....	941,850.00
	<hr/>
Total, men and women.....	\$4,307,500.00

III. (A. Pages 62 and 63.) Loss, present value of unrealized future earnings of those who died from tuberculosis.

Wealth producers—

2,142 men x \$9,501.33.....	\$20,351,848.86
1,196 women x \$4,750.66.....	5,681,789.36
	<hr/>
Total, men and women.....	\$26,033,638.22

I	\$4,569,435.00
II	4,307,500.00
III	26,033,638.22
	<hr/>

Total loss from tuberculosis, 1911..... \$34,910,573.22

Note—This estimate does not include the loss occasioned by illness from which tuberculus patients recover.

Total loss from tuberculosis in Missouri, 1911.....	\$34,910,573.22
Population of Missouri, estimated mid-year 1911.....	3,295,619
Loss from tuberculosis per capita population, 1911.....	\$10.59

Total taxable wealth of Missouri (C. page 504), 1911.	\$1,676,402,812.26
Loss from tuberculosis per \$100 taxable wealth.....	2.082
Somewhat more than one-half the income from a conservative bond investment.	

Total loss from tuberculosis in Missouri, 1911.....	\$34,910,573.22
Estimated number of deaths from tuberculosis, 1911.....	5,564
Loss from tuberculosis to State, per death from same....	\$6,274.37

Total taxable wealth of Missouri, 1911.....	\$1,676,402,812.26
Total loss from tuberculosis in Missouri, 1911.....	34,910,573.22
Taxable wealth per capita population in Missouri, 1911	508.67
Loss from tuberculosis per capita population, 1911....	10.59

The total loss from tuberculosis to the State in 1911 was \$34,910,573.22, which is 4 per cent of \$872,764,330.50, a sum which is somewhat more than one-half of the total taxable wealth; to save this loss the State would be justified to bond itself at 4 per cent for one-half of its total taxable wealth, if thereby tuberculosis might be suppressed.

For the school year 1909-10, there was expended on account of the public schools, a total sum of \$13,905,188.80 (C. page 539), for teachers' wages, incidental expenses (clerk, janitor, fuel, library and school supplies), and for building purposes (school sites, buildings, furniture, repairs, bonds and interest). The loss from tuberculosis in 1911 was approximately 2½ times the total expenditures for all public school purposes for the school year 1909-10.

The State spent 18 1.10 cents a day upon each child in attendance at the public schools (C., page 538), and at the same time permitted the loss of 45 9.10 cents per child per day's attendance, from tuberculosis. Because of this loss from tuberculosis, school officers have been constrained to keep down the cost of education by paying inadequate salaries to its teachers, thus keeping down the quality of instruction, but have made no effort to teach hygiene pertaining to tuberculosis in its public schools whereby this loss might be averted a "Save at the vent and waste at the spigot" policy.

MISSOURI ADMITTED INTO THE REGISTRATION AREA.

The following extract is taken from a letter received from the Director of the United States Bureau of the Census and directed to this office:

"In 1909 the Legislature of Missouri passed a law for the immediate registration of births and deaths, which went into effect under the administration of your Board on February 1, 1910. The law was that recommended by the Bureau of the Census, and its operation has been carefully observed by this office.

You have met great difficulties and, while there are certain counties in Missouri in which the law is not completely in force, I believe, after careful examination of your results and of the recommendation of Dr. Cressy L. Wilbur, Chief Statistician for Vital Statistics, that I am warranted in authorizing the admission of Missouri into the Census Registration Area for deaths for the calendar year 1911, the first complete calendar year since the law went into effect."

It is to be noted that after ten months' operation of the law, requiring the registration of births and deaths, that this State was admitted into the Registration Area, Missouri making the twentieth state comprising this area.

Much of the satisfactory operations of the law has been due to the painstaking and diligent efforts of the Local Registrars of the various districts, and to the faithful compliance to the law by the physicians and undertakers of the State.

SOME IMPORTANT CAUSES OF DEATH AS SHOWN BY STATISTICS FOR THE LAST SIX MONTHS OF 1911.

Tuberculosis.

During the last six months of the year, 1,997 deaths were due to tuberculosis of the lungs. Two hundred and fifty-three deaths were due to tuberculosis of other organs, making a total of deaths from this disease of 2,250, or 11.4 per cent of the total number of deaths from all causes occurring during this period.

Diarrhoea and Enteritis.

One thousand four hundred and forty-three deaths occurred during the last six months in children under two years of age, due to diarrhoea and enteritis. Of the 20,371 deaths from all causes, 7.8 per cent were due to the above-named cause, occurring at the above-given period of life. In the September bulletin some important data was printed with reference to diarrhoea in children. This immense death rate in the young should attract the attention, not only of the medical profession, but of all those interested in economical and social problems.

Scarlet Fever.

During the last six months an exceedingly low death rate from this disease was reported, the returns showing only 65 deaths as having occurred in the State from scarlet fever.

Diphtheria and Croup.

Three hundred and ninety deaths from diphtheria and croup were reported to the Central Bureau of Vital Statistics for the past six months just closed.

In the "International Classification of the Cause of Death," "croup" continues to be coupled with "diphtheria." It is, however, understood by the term "diphtheria and croup," only "diphtheria" is meant. All fatal cases of croup should be reported as diphtheria.

Whooping Cough.

During the last six months 263 deaths were reported as due to whooping cough, or more than four times as many as were caused by scarlet fever. This fact clearly points to the necessity of the State and municipalities adopting laws compelling a very rigid quarantine of this disease. Quarantine is fairly well enforced as concerns scarlatina, yet those suffering from whooping cough are permitted, in many communities, the freedom of the schools, and are allowed to mingle promiscuously with the public. This disease, which for the last six months, caused more than four times the deaths that scarlet fever caused, should, both by public sentiment or demand, and by statute be placed among the list of diseases requiring careful segregation and quarantine.

Typhoid Fever.

Of the 20,371 deaths occurring from all causes during the past six months, 771, or 3.78 per cent were due to typhoid fever.

This disease, which is so clearly preventable, is demanding a death rate which speaks against sanitary conditions in many sections of the State.

Births and Deaths Reported in Missouri (Stillbirths not Included) From July 1 to December 31, 1911.

Counties.	Population, 1911.....	Total births during six months ending Dec. 31st...	Total deaths during six months ending Dec. 31st...	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup...	Influenza.....	Tuberculosis of the Lungs.....	Other forms of tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).....	Acute Nephritis and Bright's Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
Adair—	22,700																											
July.....		47	28														4	2		3					1			9
August.....		54	21														2	2		1				1				2
September.....		42	16							1							4	4		4								2
October.....		31	20							2							1	2		1								3
November.....		39	19														4	1		1								5
December.....		67	22							1							2	4		1								4
Total.....		280	126																									
Andrew—	15,282																											
July.....		32	12	1									2				2	1		1					2			2
August.....		29	12	1													3											4
September.....		19	12	1						1			2				1			3					1			2
October.....		42	17	1									1				6			2				2				2
November.....		26	6														1											1
December.....		39	9							1							1	2		1				1				1
Total.....		187	68																									
Atchison—	13,604																											
July.....		22	14										1				1	2		1								5
August.....		22	13										1				2	1		1								4
September.....		22	7							1							1			2								1
October.....		11	5																	2								2
November.....		10	9										1				1											2
December.....		37	15							1			1				1	1										3
Totals.....		124	58																									

BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) FROM JULY 1 TO DECEMBER 31, 1911—

Continued.

Counties.	Population, 1910.....	Total births during six months ending Dec. 31st..	Total deaths during six months ending Dec. 31st..	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of the Lungs.....	Other forms of tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhea and Enteritis (under 2 years of age).	Bright's Disease.....	Acute Nephritis and The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
Bollinger—	14,576																											
July.....		36	9	3							1									1		1					2	
August.....		44	5	1							3									4							1	
September.....		35	12	1				1			3		1						1		1						1	
October.....		41	14	2							1							1		1							5	
November.....		50	14	3							1		1					1		1							1	
December.....		35	8											1			1	1	1								2	
Totals.....		241	62																									
Boone—	30,533																											
July.....		39	24					1			1	1	1					3	3	4	1	5				1	2	
August.....		63	28	3										1				4	4								3	
September.....		70	36	2							3							3	2		4	3					12	
October.....		46	24								2							1	2		6						6	
November.....		43	14								2							1	2								4	
December.....		58	38	2		1	1				2	1	1	1		1	4	4	3	2	1						6	
Totals.....		319	164																									
Buchanan (outside St. Joseph)—	15,517																											
July.....		18	11									1						1	1		1	2					45	
August.....		22	14										2					2									2	
September.....		20	9																								3	
October.....		20	10	1				1			2							1	3		1	1						
November.....		18	17								6							2	3									
December.....		30	20								2		1					2	4		2						4	
Totals.....		128	81																									

BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) FROM JULY 1ST TO DECEMBER 31ST, 1911

—Continued.

Counties.	Population, 1910.....	Total births during six months ending Dec. 31st..	Total deaths during six months ending Dec. 31st..	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup...	Influenza.....	Tuberculosis of the Lungs.....	Other forms of tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).	Acute Nephritis and Bright's Disease.....	The puerperal state....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
Cape Girardeau—	27,621																											
July.....		50	36	2		1		3		5	1	3				1	2	2	1	3	4						11	
August.....		60	27	3						1	1	1					3			3	1	1					13	
September.....		57	22	1						2							3			3	2	2					7	
October.....		69	39	4			1			6	1	1					3	4	1	2	1	2					2	
November.....		63	35	2				1	4	4		1					3	1	1	4	1	4					7	
December.....		58	35	1					2	3		1				2	1	5	3	1	3	1						
Totals.....		357	194																									
Carroll—	23,098																											
July.....		28	24	1				1		2		1	1			1	2			3	1						9	
August.....		41	25	2						2		1	1				5			3	1						5	
September.....		48	19							2							2			4	2						2	
October.....		38	14							1		1	1				4			1	1						3	
November.....		41	17					1		2		1					3			1	2						5	
December.....		38	26							2		3				2	2	6		1							2	
Totals.....		234	125																									
Carter—	5,504																											
July.....		8	5																	1							4	
August.....		15	3																								4	
September.....		12	2																	1							1	
October.....		10	1																		1							
November.....		10	12							1							1											
December.....		23	3						1	1							1	1		2	2						3	
Totals.....		78	31																									

Case—	22,973																			
July	44	30				1			1			4	2		1	3	3			15
August	42	18						1				2	2	1		4	1	1		6
September	53	15						1				2	2	3		1	2	1		3
October	42	20				2			1			2	3	1		3	1	1		4
November	37	17	2			2	1	2		1		2	1	1	1					5
December	34	10										1	2				1	1		1
Totals	252	110												4						
Cedar—	16,080																			
July	21	13						1					1		1	2	3		1	4
August	29	16	1					1		1		1	1		1	2			1	9
September	27	5										1	1		1				1	1
October	32	15	1					3			1	2	2						1	6
November	36	12				1		3				2	3			1	1			1
December	28	13						2			1	3				1	2			4
Totals	173	74											3							
Chariton—	23,503																			
July	52	36	1					3		2	2		3	2	1	5		2	1	13
August	41	27	1					2		2	1		3	3		2	3	1	2	6
September	45	7						3					2	2						3
October	40	22	1			1		3	2	2	1		2	2			2		1	5
November	37	15				1		1		1			3	1			1	2		5
December	53	19				2		4	1	1	1			3	2	1		2		1
Totals	268	126																		
Christian—	15,832																			
July	39	12	1			1		2					2			1	2			3
August	53	17	3					2			1			1	1	1	1			7
September	46	8											1							2
October	33	11						1		1			1			1	1		1	3
November	55	13				1				1	1		3					2		3
December	47	12	1			1		1		1			1	1	3	1		1		1
Totals	273	73																		
Clark—	12,811																			
July	17	8	1					1		1	1		1	1	1		1			1
August	17	13				1		3	1	1	1		1			2	1			2
September	23	15	1					2		4			1							6
October	19	10				1		1		2			1	3			1	1	1	2
November	11	13											1	1			1	1		3
December	22	12	1			1		3					2	3		1	1	1		
Totals	109	71																		

BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) FROM JULY 1ST TO DECEMBER 31ST, 1911

—Continued.

Counties.	Population, 1910.....	Total b irths during six months ending Dec. 31st..	Total deaths during six months ending Dec. 31st..	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup...	Influenza.....	Tuberculosis of the Lungs.....	Other forms of tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system...	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).....	Acute Nephritis and Bright's Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
Clay—	20,302														1													
		31	31	1									3	1				7	1		1	2						6
		27	27	1									1					4										8
		39	21	2														5										1
		28	31										1					3										7
		33	27	2									1					2										4
		34	33	1									1	1	1			9	5		1	1						7
Totals.....		192	170																									
Clinton—	15,297																											
		22	19	1								2		2				4			2	2						4
		20	9									1		1														1
		28	18	1								3						3	1		1	1						3
		25	20									2		2				1										3
		26	13									1		1				3		1	2	3						7
		20	12	1									2	1	1			2	1			1						2
Totals.....		141	91																									
Cole (outside Jefferson City)—	10,107																											
		10	4																									1
		23	8		1																							2
		24	6																									1
		27	7	1														3										2
		15	7											1														1
		24	5																									3
Totals.....		123	37																									

BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) FROM JULY 1ST TO DECEMBER 31ST, 1911

—Continued.

Counties.	Population, 1910.....	Total births during six months ending Dec. 31st..	Total deaths during six months ending Dec. 31st..	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of the Lungs.....	Other forms of tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).....	Acute Nephritis and Bright's Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
Daviess—	17,605																											
July.....		35	13								2						3	1										5
August.....		21	16								1		2				1	3								1		4
September.....		37	18	1							2	2		1			1	4										2
October.....		29	14								4						2			3								3
November.....		32	18	1							2										1				1			3
December.....		31	10							1	2		1						3	1	1							3
Totals.....		185	89																									
DeKalb—	12,531																											
July.....		26	9								1							2	1									4
August.....		26	9							1								2	1		1							3
September.....		19	7	1													1	1										2
October.....		16	12								1						2	1										7
November.....		24	8								1							1		1		1						2
December.....		27	16									1						2	1	1	1							10
Totals.....		138	61																									
Dent—	13,245																											
July.....		22	9	1													1	1		1								6
August.....		30	13								2								1									5
September.....		31	2	1																								
October.....		42	12																									
November.....		34	17								4	1							2		1							6
December.....		22	11							1	2							2	1	2								2
Totals.....		181	54																									

[illegible]

BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) FROM JULY 1ST TO DECEMBER 31ST, 1911
—Continued.

Counties.	Population, 1910.....	Total births during six months ending Dec. 31st..	Total deaths during six months ending Dec. 31st..	Important causes of death.																									
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup...	Influenza.....	Tuberculosis of the Lungs.....	Other forms of tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age) .	Acute Nephritis and Bright's Disease.....	The puerperal state....	Accidents.....	Suicides.....	Homicides.....	Other causes.....		
Greene (outside Springfield)—	28,630																												
July.....		49	26								3	2	1								3							6	
August.....		43	25									2									2							11	
September.....		73	13	1								2									3							3	
October.....		57	22	3				2			1										3							5	
November.....		44	14	1																								5	
December.....		54	34	2							5		1								1							10	
Totals.....		320	134																										
Springfield —	35,201																												
July.....		66	57	4		1		2	1		7	2	2				4	6	1		4	2		1				17	
August.....		73	42	1		1		1			4	2	4				2	5			4							10	
September.....		67	47	8						3	4	2					2	4	2		1	3						12	
October.....		67	66	10						11	6		3				1	4	4		4	4						12	
November.....		42	57	8			1			2	7		3				1	6	4		1	3						16	
December.....		46	34	1						2	2		1	1			1	3	10			4						4	
Totals.....		361	303																										
Grundy —	16,744																												
July.....		27	17				1						1				1	2			2	1						8	
August.....		24	12														1	4										3	
September.....		26	16								1		3				2	1										4	
October.....		28	14	3													3	1										5	
November.....		25	11	1							1		2	1				1										3	
December.....		28	19								2								2									7	
Totals.....		158	89																										

BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) FROM JULY 1ST TO DECEMBER 31ST, 1911

—Continued.

Counties.	Population, 1910.....	Total b irths during six months ending Dec. 31st..	Total d eaths during six months ending Dec. 31st..	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of the Lungs.....	Other forms of tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).	Acute Nephritis and Bright's Disease.....	The puerperal state....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
Howell—	21,065																											
July.....		46	25	2							4	2	2				3	2	1	1	1	1	1					6
August.....		60	19	4							2	1	1				1	1	1	1	1	1						7
September.....		56	18	2							2	1					2	1	3	1	1	1						5
October.....		52	24	1						2	3						3	2	3	3	3	1						3
November.....		68	18	1						1	1						1	1	1	1	1	1						5
December.....		42	16								2		2				1	3	3									6
Totals.....		324	120																									
Iron—	8,563																											
July.....		20	7								1							1		1								3
August.....		14	3	1			1				1							2		1								0
September.....		17	12	1							2		1				1	2	1	1								4
October.....		22	13							3	1						1	2	1	3								3
November.....		19	10	1							2		1					1		1								2
December.....		25	6							1											1							4
Totals.....		117	51																									
Jackson (outside Kansas City)—	35,141																											
July.....		58	33								3		1	1			1	7	2	3	3	1						12
August.....		60	28							3			2				3	3	1	4	2	1						6
September.....		39	37	3							1	3					2	6	3	2	2	2	2					11
October.....		58	36	1						1	2						3	3	3	5	2	5	2					10
November.....		43	35														5	1	3	2	2	2						10
December.....		108	46	3						1	1		3		1		4	6	2	4	3	3	2					10
Totals.....		366	215																									

[illegible]

BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) FROM JULY 1 TO DECEMBER 31, 1911

—Continued.

Counties.	Population, 1910.....	Total b i r t h s during six months ending Dec. 31st..	Total d e a t h s during six months ending Dec. 31st..	Important causes of death.																								
				Typhoid Fever.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of t h e Lungs.....	Other forms of tubercu- losis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomy- elitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system.....	Pneumonia, B r o n c h- pneumonia.....	Other diseases of respira- tory system.....	Diarrhoea and Enteritis (under 2 years of age).	A c u t e Nephritis and Bright's Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....		
Johnson—	26,297																											
July.....		38	28	1						2	1				4	3	1	1	3	1					3	12		
August.....		63	19	1												3	4	2	1							2		
September.....		31	19							4	1					3	1	2	1							3		
October.....		48	19													5	2	1								7		
November.....		36	24													3	2	2	1							9		
December.....		50	16	1						1						3	1									5		
Totals.....		266	125																									
Knox—	12,403																											
July.....		21	13												3	1			1							4		
August.....		20	3				1				1					2												
September.....		23	13	1						1	1				1	2	2		2							3		
October.....		24	6												1	2	2		1	1						1		
November.....		18	16	1							1	1			4	2	2	1		1						4		
December.....		21	5							1						1				1						1		
Totals.....		127	56																									
Laclede—	17,363																											
July.....		34	15	1						1		1				1	1		4	1						6		
August.....		44	9	2							1					2	1									1		
September.....		32	6													1	2									3		
October.....		26	15	1						1		2				3	2		1	1						5		
November.....		39	19	1												2	1	1	1	2						7		
December.....		26	11							1					1	3	2	1								1		
Totals.....		201	75																									

BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) FROM JULY 1 TO DECEMBER 31, 1911

—Continued.

Counties.	Population, 1910.....	Total births during six months ending Dec. 31st..	Total deaths during six months ending Dec. 31st..	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of the Lungs.....	Other forms of tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system.....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).....	Acute Nephritis and Bright's Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
Livingston—	19,453																											
July.....		26	28	1							1					2				2		2				1	17	
August.....		40	15	2							1		1			1		1									7	
September.....		24	16								3		1					2		1							6	
October.....		40	23	1					1		2		1		2		3		1		2						5	
November.....		29	12								2						1		1						1		2	
December.....		33	21						2	1			1			2	4	3	1								2	
Totals.....		192	115																									
McDonald—	13,539																											
July.....		15	8	1							1									2							3	
August.....		36	8								1		1				3										1	
September.....		18	5	1						1							2										1	
October.....		19	11	2					1															1			5	
November.....		22	6								2								1								2	
December.....		11	9							1	1		1		2												4	
Totals.....		121	47																									
Macon—	30,868																											
July.....		45	21	3						1			1				4				3	1	1				6	
August.....		77	32	2							4		3								3	3	2				10	
September.....		45	29	1									2				5		2		2	2					5	
October.....		72	27	3							2		3				5		1		4	1					6	
November.....		47	37	3							4		2				5		2		3						9	
December.....		65	24	1					1		1		3	1			3	3	3		1	1					6	
Totals.....		351	170																									

BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) FROM JULY 1 TO DECEMBER 31, 1911—
Continued.

Counties.	Population, 1910.	Total b i r t h s during six months ending Dec. 31st.	Total d e a t h s during six months ending Dec. 31st.	Important causes of death.																									
				Typhoid Fever.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Croup.	Influenza.	Tuberculosis of the Lungs.	Other forms of tuberculosis.	Cancer.	Diabetes.	Epidemic Cerebrospinal Meningitis.	Acute Anterior Poliomyelitis.	Other diseases of the nervous system.	Diseases of the heart and circulatory system.	Pneumonia, Bronchopneumonia.	Other diseases of respiratory system.	Diarrhoea and Enteritis (under 2 years of age).	Acute Nephritis and Bright's Disease.	The puerperal state.	Accidents.	Suicides.	Homicides.	Other causes.		
Miller—	16,717																												
July.		24	17							1			1			3		4	1	2		1						4	
August.		42	22	1									1					1		4		1						8	
September.		29	12										1					1	1	1								6	
October.		40	12	1									1					2	1	1								6	
November.		46	18	3					4				1			1				1		1						4	
December.		39	10					3				2																3	
Totals.		220	91																										
Mississippi—	14,557																												
July.		26	21	1							2		3					1		3		1						5	
August.		45	19						1		1		2		1			1		8		1						8	
September.		34	22	3							1							1		9		1						3	
October.		37	23	2						1			1					1	2	4								10	
November.		46	17	2					1		1							1	1	1								7	
December.		38	25	2						2	1					1		2	2	1								8	
Totals.		226	127																										
Moniteau—	14,375																												
July.		16	13								4						2	2				1						4	
August.		38	8	1													1	2				1						2	
September.		25	10								2																	5	
October.		22	14															1	1									9	
November.		15	17	1						1								2	1			2						3	
December.		33	11								1	1					2	1	3	1								5	
Totals.		149	73																										

BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) FROM JULY 1 TO DECEMBER 31, 1911—
Continued.

Counties.	Population, 1910.....	Total births during six months ending Dec. 31st...	Total deaths during six months ending Dec. 31st...	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of the Lungs.....	Other forms of tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).	Bright's Disease.....	The puerperal state....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
Nodaway—	28,833																											
July.....		56	26								1	1	1	1			5	3	1			1		4	1			7
August.....		59	18									1	1	1							1		2					6
September.....		57	22	1							2						2	3										8
October.....		38	15								3						1	2	1			1		1				2
November.....		65	34	4							1		4	1			2	5	1					5	1			7
December.....		68	17										2															7
Totals.....		343	132																									
Oregon—	14,681																											
July.....		27	8								2								1			3						2
August.....		35	6						2											3								1
September.....		30	10	4									1				1						1					3
October.....		30	11								1						1	1	1			1						7
November.....		43	9				1									1	1		1									2
December.....		41	11	1							1							3	1			2						2
Totals.....		206	55																									
Osage—	14,283																											
July.....		34	15	3									1					1	1			2		1				5
August.....		35	13	2			1	1				1					2	1				1						4
September.....		35	12	1						3							1		1									3
October.....		31	11	1							4			1			1		1									4
November.....		47	13	2						2																		3
December.....		38	10							1							2	1	1									4
Totals.....		220	74																									

BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) FROM JULY 1ST TO DECEMBER 31ST, 1911

—Continued.

Counties.	Population, 1910.....	Total b i r t h s during six months ending Dec. 31st..	Total d e a t h s during six months ending Dec. 31st..	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of t h e Lungs.....	Other forms of tubercu- losis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Polio- myelitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system.....	Pneumonia, B r o n c h o- pneumonia.....	Other diseases of respira- tory system.....	Diarrhoea and Enteritis (under 2 years of age).....	Acute Nephritis and Bright's Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
Phelps—	15,796					1														2								1
July.....		34	12																									4
August.....		27	13	2								2																2
September.....		32	12	2								1																2
October.....		25	10																									2
November.....		28	16																									6
December.....		39	12								1									1								3
Totals.....		185	75																									
Pike—	22,556																											
July.....		24	23	1								3																8
August.....		37	20	1																								6
September.....		28	27	1								6																9
October.....		40	26	1									1															6
November.....		34	29									3																7
December.....		41	26								5																	7
Totals.....		204	151																									
Platte—	14,429																											
July.....		31	15								2																	4
August.....		36	11								1	1	1									1	1					4
September.....		34	11								1		1									1						3
October.....		19	8	1									1															2
November.....		35	9	1							1																	3
December.....		26	9	1							1		1		1		1											3
Totals.....		181	63																									

BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) FROM JULY 1 TO DECEMBER 31, 1911—
Continued.

Counties.	Population, 1910.....	Total b i r t h s during six months ending Dec. 31st..	Total d e a t h s during six months ending Dec. 31st..	Important causes of death.																												
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of t h e Lungs.....	Other forms of tubercu- losis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomy- elitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system....	Pneumonia, Broncho- pneumonia.....	Other diseases of respira- tory system.....	Diarrhoea and Enteritis (under 2 years of age).	Brigh's Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....					
Moberly— July..... August..... September..... October..... November..... December..... Totals.....	10,923	11 24 21 21 19 16	9 12 13 12 13 13	1 . . 1 1 .	1	3 3 . . 1 1	1	2	1	1	1	1	1	1	2	1	1	1	3	2	1	1	1	1	1	1	1					
		112	68				
		Ray— July..... August..... September..... October..... November..... December..... Totals.....	21,451	30 44 31 33 36 40	17 23 12 19 31 26	1 2 1 1 2 1	1	3 1 1 1 6 1	1	1	1	1	1	3	3	1	4	2	2	1	2	1	1	1	1	1	1	7 9 6 6 6 12				
				214	128		
				Reynolds— July..... August..... September..... October..... November..... December..... Totals.....	9,592	14 23 20 25 14 25	5 7 2 6 13 5	1 2 1 1 1 5	1	1 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2 3 1 2 5 1		
						121	38

BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) FROM JULY 1ST TO DECEMBER 31ST, 1911

—Continued.

Counties.	Population, 1910.....	Total births during six months ending Dec. 31st..	Total deaths during six months ending Dec. 31st..	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of the Lungs.....	Other forms of tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age) .	Acute Nephritis and Bright's Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
St. Louis—	82,417																											
July.....		116	136	2				1			51	1	2	1			9	12	3	5	17	7		5	2	18		
August.....		154	92	6				1			35	2	5				6	6	9	3	6	5		7	4	8		
September.....		124	104	4							36			1			6	13	2	1	11	3		5	1	14		
October.....		119	84	1			1				35	2	4	1			4	7	2	1	8	2		5	1	10		
November.....		137	91								32		2	1			10	9	2	2	1	2		1	1	18		
December.....		131	95	1				1	4		34		1	1			7	15	9	2	1	2		4	1	10		
Totals.....		781	602																									
Saline—	29,448																											
July.....		45	24								3		1				6	1			2			1		10		
August.....		49	39								1						9	5	1		3			5		15		
September.....		39	16	1								2						3	3		1					9		
October.....		60	28	2					1		3		1				2	4	1	1	2	1		2		7		
November.....		56	20	1							2		2	1			3	3	1		2			1		5		
December.....		52	30								5		1				5	2	1	1		2				12		
Totals.....		301	157																									
Schuyler—	9,062																											
July.....		12	7								1						1	1			1					2		
August.....		20	2																1							1		
September.....		20	5																							4		
October.....		15	9								1		1				2					1			1		2	
November.....		21	14								2							1	1							4		
December.....		27	10								2	2			1			1	1	1						2		
Totals.....		115	47																									

BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) FROM JULY 1 TO DECEMBER 31, 1911

—Continued.

Counties.	Population, 1910.....	Total b i r t h s during six months ending Dec. 31st..	Total d e a t h s during six months ending Dec. 31st..	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of t h e Lungs.....	Other forms of tubercu- losis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomy- elitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system....	Pneumonia, B r o n c h o- pneumonia.....	Other diseases of respira- tory system.....	Diarrhoea and Enteritis (under 2 years of age).....	Bright's Disease.....	A c u t e Nephritis and The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
Stone—	11,559																											
July.....		23	4	1							1										1							2
August.....		25	3																									4
September.....		30	7								2																	2
October.....		30	9	1						2	1																	2
November.....		38	6							1	1																	2
December.....		29	12	1						2			1															3
Totals.....		175	41																									
Sullivan—	18,598																											
July.....		36	16								2		1					1	2		2							8
August.....		46	12	2							3							1			1							2
September.....		53	14	2																								6
October.....		36	8	1																	1							4
November.....		50	11	3				1									1	2			1							2
December.....		51	16								1		1				2	1	2		1		1					7
Totals.....		271	77																									
Taney—	9,134																											
July.....		9	6								1		1															3
August.....		12	4																									4
September.....		17	10								1																	4
October.....		14	5								1																	2
November.....		35	10																									2
December.....		23	12					1					4															3
Totals.....		110	47																									

BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) FROM JULY 1 TO DECEMBER 31, 1911—
Continued.

Counties.	Population, 1910.....	Total births during six months ending Dec. 31st...	Total deaths during six months ending Dec. 31st...	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup...	Influenza.....	Tuberculosis of the Lungs.....	Other forms of tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system.....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).....	Bright's Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
Webster—	17,377					1						3		1						1		3					3	
		36	14											1	1												3	
		34	10	3																							3	
		54	12	2					1			2		1													3	
		28	19	4								1		1													4	
		42	9										1						1								2	
		43	15							1						1	3										4	
	Totals.....	237	79																									
	Worth—	8,007					1																					1
			10	3																		1						
		9																										
		13																										
		20	2																									
		17	5											2													3	
		14	2														1	1										
Totals.....	83	18																										
Wright—	18,315											1		1													6	
		27	12	1								1		1					1								1	
		39	9	3																							2	
		32	10									1		1													3	
		26	11									1		1													2	
		72	20	3									2	2					3								3	
		60	32	1					1				2				1	6		2							7	
Totals.....	256	94																										

THE BACTERIOLOGICAL LABORATORY.

The work of the last quarter of 1911 is shown in the following tables. The total number of examinations for the three months was 876. For the corresponding period of 1910, the number was 329:

TABLE I.
TOTAL EXAMINATIONS FOR THREE MONTHS.

	Tuberculosis...	Typhoid.....	Diphtheria....	Malaria.....	Rabies.....	Gonorrhoea...	Water.....	Tissues.....	Urine.....	Miscellaneous.	Totals.....
October.....	75	47	38	5	1	2	19	5	29	11	232
November.....	99	57	74	6	2	7	14	15	41	17	332
December.....	105	29	73	7	0	3	8	10	54	23	312
Totals.....	279	133	125	18	3	12	41	30	124	51	
Grand Total.....											876

The work of the laboratory by counties is shown in Table II, which gives the number of specimens received from each county:

TABLE II.
WORK BY COUNTIES FOR THREE MONTHS.

County.	Number	County.	Number
Adair.....	0	Clinton.....	2
Andrew.....	3	Cole.....	160
Atchison.....	5	Cooper.....	3
Audrain.....	11	Crawford.....	6
Barry.....	6	Dade.....	5
Barton.....	5	Dallas.....	3
Bates.....	19	Davies.....	8
Benton.....	5	DeKalb.....	2
Bollinger.....	2	Dent.....	2
Boone.....	3	Douglas.....	0
Buchanan.....	6	Dunklin.....	19
Butler.....	3	Franklin.....	39
Caldwell.....	2	Gasconade.....	2
Callaway.....	3	Gentry.....	5
Camden.....	2	Greene.....	23
Cape Girardeau.....	15	Grundy.....	5
Carroll.....	8	Harrison.....	4
Carter.....	0	Henry.....	8
Cass.....	8	Hickory.....	0
Cedar.....	1	Holt.....	1
Chariton.....	13	Howard.....	2
Christian.....	4	Howell.....	48
Clark.....	2	Iron.....	1
Clay.....	1	Jackson.....	6

TABLE II.—Continued.

County.	Number.	County.	Number.
Jasper.....	24	Pike.....	3
Jefferson.....	0	Platte.....	10
Johnson.....	6	Polk.....	9
Knox.....	1	Pulaski.....	2
Laclede.....	1	Putnam.....	5
Lafayette.....	18	Ralls.....	0
Lawrence.....	2	Randolph.....	4
Lewis.....	5	Ray.....	7
Lincoln.....	6	Reynolds.....	9
Linn.....	11	Ripley.....	4
Livingston.....	20	Saline.....	5
McDonald.....	2	Schuyler.....	9
Macon.....	5	Scotland.....	1
Madison.....	0	Scott.....	4
Maries.....	6	Shannon.....	3
Marion.....	1	Shelby.....	12
Mercer.....	0	St. Charles.....	3
Miller.....	18	St. Clair.....	2
Mississippi.....	2	St. Francois.....	31
Moniteau.....	13	Ste. Genevieve.....	0
Monroe.....	12	St. Louis.....	5
Montgomery.....	2	Stoddard.....	4
Morgan.....	1	Stone.....	0
New Madrid.....	7	Sullivan.....	7
Newton.....	9	Taney.....	2
Nodaway.....	3	Texas.....	1
Oregon.....	0	Vernon.....	20
Osage.....	0	Warren.....	1
Ozark.....	0	Washington.....	1
Pemiscot.....	2	Wayne.....	12
Perry.....	14	Webster.....	9
Pettis.....	9	Worth.....	1
Phelps.....	2	Wright.....	7

Three hundred and forty-eight physicians have sent specimens to the laboratory, the number varying from 1 to 41.

TABLE III.

DISTRIBUTION OF SPECIMENS.

Physicians sending 1 specimen.....	205
Physicians sending 2 specimens.....	55
Physicians sending 3 specimens.....	32
Physicians sending 4 specimens.....	12
Physicians sending 5 specimens.....	17
Physicians sending 6 specimens.....	7
Physicians sending 7 specimens.....	3
Physicians sending 8 specimens.....	1
Physicians sending 9 specimens.....	4
Physicians sending 10 specimens.....	2
Physicians sending 11 specimens.....	2

Eight physicians sent, respectively, 12, 17, 18, 19, 21, 26, 29 and 41 specimens. The 41 examinations were 40 samples of sputum, and 1 throat swab, sent from the State Prison.

NOTES.

The laboratory strives to render the best possible service to the physicians of this State in the control of infectious diseases. For this reason it has been found necessary to discontinue the routine chemical analysis of urine. The microscopical examination of the sediment will be made whenever time allows, as heretofore.

The following correspondence touches upon the work of the laboratory, and the matter of fees, concerning which there is frequent inquiry:

_____, Mo.

_____ 1911.

Dr. Murray C. Stone, Jefferson City, Mo.:

Dear Doctor: Do you make bacteriological examinations free? I have been sending my specimens to Chicago.

I note you make examinations of gonococcus infection free.

Yours fraternally,

_____.

Dear Doctor: In reply to your letter of _____, I am pleased to state that all examinations at this laboratory are made free for physicians in the State. Of course, in the large cities, where there are municipal laboratories, the work naturally goes to them. The sending of urine, tissue, etc., the examination of which has no particular bearing upon the public health, is not encouraged, but these specimens are examined whenever possible, more as a matter of courtesy to the physicians. It is taken for granted, of course, that material of this nature is sent only from such cases as are unable to pay for the examination in the private laboratories.

On the other hand, we wish to increase as much as possible, the work of the laboratory in controlling any disease of a bacterial nature, that is dangerous to the public health. It was for this reason that the examination for gonococcus infection was recently taken up.

I am enclosing herewith some "Request Cards," and hoping you will soon begin to use the laboratory.

I remain, yours very truly,

_____.

State Bacteriologist.

Physicians are urged to use the "Request Cards" when sending specimens. They may be obtained by addressing the State Bacteriologist; and same are always sent out with reports. The "Request Cards," properly filled out, gives on one side all the necessary data, while the other side bears the original and permanent record of the examination.

A number of throat swabs still arrive in other than the regulation outfits provided by the Board of Health. Physicians will please obtain these outfits from the County Health Officer, or from the laboratory. By their use you are not only complying with the postal regulations, but you are sure of obtaining a culture free from contamination, and moreover, are not exposing those handling the material to infection.

Owing to an oversight in the printing of the labels of the diphtheria outfits, the place for the sender's name was given too prominent a place, with the result that tubes have been returned to the physicians. Therefore, physicians are requested *not* to fill out the space following the word "From."

Hereafter the Gaffky scale will be used in reporting positive sputum examinations. It is not intended that this grading is to indicate the condition of the patient, but it is believed to be of some value in denoting the progress of the pulmonary condition from time to time.

GAFFKY SCALE. (Modified.)

For comparison of positive specimens.

- 1.—Only 10 bacilli in whole preparation.
- 2.—Only 1 bacillus on average in many fields.
- 3.—Only 1 baccillus on average in each field.
- 4.—2 to 3 bacilli on average in each field.
- 5.—4 to 6 bacilli on average in each field.
- 6.—7 to 12 bacilli on average in each field.
- 7.—Fairly numerous on average in each field.
- 8.—Numerous in each field.
- 9.—Very numerous on average in many fields.
- 10.—Enormous masses on average in many fields.

A great majority of blood smears still continue to be unsatisfactory for examination. The technique of making blood smears can easily be acquired with a little practice.